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November 10, 1999

Via Hand Delivery

Magalie Roman Salas, Secretary
Federal Communications Commission
445 12th St., S.W.
Room TW-B204
Washington, D.C. 20554

Re: WT Docket No. 99-266

Dear Ms. Salas:

Transmitted herewith for filing on behalf of SkyBridge L.L.C. ("SkyBridge") are SkyBridge's comments in the above-referenced proceeding. SkyBridge requests leave to file these comments one day beyond the established deadline of November 9, 1999. The delay in filing resulted from a miscommunication between SkyBridge and its counsel. Acceptance of these comments one day late will not prejudice any party and will ensure that the Commission has the benefit of a complete record in this crucial proceeding.

If there are any questions regarding this matter, please contact the undersigned.

Respectfully submitted,

Kira A. Merski

Kira A. Merski
Attorney for SkyBridge L.L.C.

Enclosure

Before the
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Extending Wireless	)	WT Docket No. 99-266
Telecommunications Services	)	
To Tribal Lands	)	

COMMENTS OF SKYBRIDGE L.L.C.

SkyBridge, L.L.C. ("SkyBridge") hereby submits its comments in response to the Notice of Proposed Rulemaking (the "NPRM") released in the above-capationed proceeding. In the NPRM, the Commission asked interested parties to provide comment on "potential terrestrial wireless and satellite policy initiatives to address the telecommunications needs of Indians living on tribal lands."[1] SkyBridge submits that one key means of improving access to basic and advanced telecommunications services on tribal lands is through the swift licensing and promotion of satellite broadband technology, such as that currently being developed by SkyBridge.

I. INTRODUCTION

As the Commission is aware, SkyBridge is an applicant for a Commission license for authority to launch and operate the "SkyBridge System," a global nongeostationary ("NGSO") satellite system, which will provide a range of data, voice, and video broadband services in the Fixed-Satellite Service ("FSS") in the Ku-band.[2] SkyBridge will offer

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[1] NPRM at ¶1.

[2] See Application of SkyBridge L.L.C. for Authority to Launch and Operate the SkyBridge System, File No. 48-SAT-P/LA-97, February 28, 1997; Amendment, File No. 89-SAT-AMEND-97, July 3, 1997; Amendment, File No. SAT-AMD-19980630-00056, June 30,

interactive broadband and narrowband telecommunications with fiber optic-like connectivity, and will link users to local servers as well as to terrestrial broadband and narrowband networks. The broadband services that SkyBridge will offer include high-speed Internet access and on-line services, video-conferencing and video-telephony, multimedia entertainment services, telecommuting, LAN interconnection, and infrastructure links for telephony, wireless local loops and mobile communication; the narrowband services will include voice, video-conferencing and backup long haul connection.

Thus, immediately upon commencing service in late 2001, SkyBridge could provide high-quality, cost-effective basic and advanced telecommunications services to even the most remote tribal lands. Given the difficulty and cost of providing such service through terrestrial means, the FCC ought to take every opportunity to promote alternative delivery systems, such as the SkyBridge System. Specifically, the Commission should adopt rules in its pending Notice of Proposed Rulemaking on Ku-band NGSO FSS systems that support the swift and economical introduction of this new technology.[3]

II. DISCUSSION

A. NGSO FSS Systems, Such As The SkyBridge System, Are Well-Suited To Provide the High-Quality Telecommunications Services That Tribal Lands Lack.

Although, as was evident from the testimony and written comments received by the Commission from representatives of various Native American tribes in its previous hearings dealing with this subject, telecommunications on tribal lands are woefully inadequate, the willingness of a service provider to provide service to these areas is a function of the

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1998; Amendment, File No. SAT-AMD-19990108-00004, January 8, 1999. The application, as amended, was placed on public notice on March 23, 1999. See Report No. SAT-00013.

[3] See Notice of Proposed Rulemaking, In the Matter of Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-band and Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates, ET Docket No. 98-206, RM-9047, RM-9245 (rel. Nov. 24, 1998).

concentration of paying customers. For any telecommunications service provider to realize its business plan, it must be able to serve a certain number of paying customers with the assets it deploys. The more paying customers that can be served by a given piece of infrastructure deployed (be it a fiber optic cable, a wireless tower or a satellite), the easier it is to recover the investment in infrastructure and realize one's business plan. In rural and remote areas, sufficient concentrations are hard, if not impossible, to achieve with terrestrial technologies. There are simply not enough customers that will purchase significant quantities of telecommunications services in rural areas to justify the investment. When combined with rugged terrain and harsh environmental conditions, deployment of terrestrial technologies can become even more unattractive to telecommunications providers.

The geographic and economic considerations that make service to tribal lands unattractive to terrestrial networks, however, are not an issue for providers of satellite telecommunications such as SkyBridge. NGSO FSS systems such as the SkyBridge System present an opportunity to overcome the historic discrimination that tribal lands have suffered due to their economic and geographic realities. These systems could radically transform the lives of people on tribal lands and provide a new infrastructure that will help bring tribal lands all the benefits and opportunities of the emerging information economy. Additionally, such systems will offer tribes the opportunity to take an active role in developing and deploying this infrastructure, without the need to rely on the investment decisions of outside entities.

End users will access NGSO FSS systems such as SkyBridge directly from their homes or offices, through use of a small (approximately 50 cm) satellite dish, without the need to access any intervening terrestrial network. From the prospective of a satellite orbiting hundreds of miles above the earth, remote tribal lands will be just as easy to serve as urban areas hundreds of miles away. A single SkyBridge satellite, for example, can serve an area roughly 2,000 miles in diameter. It costs the same amount to serve any user in that footprint,

regardless of whether the user is in the middle of a city, or in a remote area. Thus, all of the users within the footprint will receive the same quality service at the same price.[4]

B. NGSO FSS Systems, Such As The SkyBridge System, Are Flexible Enough To Efficiently Meet The Needs Of A Variety Of End Users.

Part of the problem faced by tribal communities in developing business opportunities is the lack of infrastructure. The ability to offer a broad range of services such as videoconferencing, high-speed data networking, Internet access and voice service at a competitive cost will provide a significant step forward in increasing economic activity, attracting business investment, and bettering the lives of citizens living on tribal lands. Without such services, it is almost impossible to attract businesses and investment. The ability to offer such services could greatly increase the opportunities for investment on tribal lands.

The SkyBridge System can serve as the backbone of a more efficient, less costly network on tribal lands. While the Commission has explored the role of other wireless technologies in providing affordable POTS service, there are often difficulties in connecting these systems to the PSTN through a reliable, affordable connection. By using an NGSO FSS user terminal as a base station for a Wireless Local Loop, an affordable and reliable backhaul channel can be set up very quickly and with minimal investment.

A SkyBridge terminal will permit data rates of up to 20 Mbps, with a low power demand of the terminal (less than 2W). It will allow people who provide medical, public safety, social and educational services on the tribal lands to provide services that would otherwise be prohibitively expensive. A small clinic may have one doctor, or even a layman with basic medical skills, to meet the health needs of the local population. In many areas the nearest hospital is hours away, and is often prohibitively expensive for many. Through the use

[4] In the Commission's previous hearings on this issue, several parties alleged that satellite services are prohibitively expensive. This is not the case for NGSO FSS services. The cost of SkyBridge services for residential users should fall in the range of $35.00 per month. This will include unlimited usage of data and voice-over-IP services at speeds of up to 20 Mbps.

of tele-medicine, diagnoses can be made, x-rays can be read and treatment can be given at a fraction of the cost it would take to either move the patient or send a doctor to the area.

Similarly, a teacher on a reservation may have only limited contact with other educators and support. Simple tasks such as reviewing new textbooks, confirming testing requirements or supplementing teaching materials are made significantly more difficult in remote communities. The cost in the additional time, fuel and effort required to access such materials can be significant. In addition, access to advanced information is often possible only in the biggest cities. Through tele-education, NGSO FSS systems can give these remote areas the same access to information, teachers and resources that was previously possible only in the largest cities.

The potential advances in agriculture are also great. Through better communications, farmers can determine market prices, locate buyers worldwide, as well as have access to information on crop production, disease prevention and marketing information. Again, the value of this information -- especially in cases where it is totally unavailable at present -- will more than justify the cost to many farmers.

Finally, training workers in technical subjects, communicating among government officials, improving the skills of health professionals, teachers and farmers are all potential benefits of NGSO FSS services that would otherwise be impossible to achieve using traditional terrestrial telecommunications.

Infrastructure is crucial to economic development, and access to broadband telecommunications is increasingly becoming an essential part of industry's infrastructure requirements. Furthering the Commission's goal of ensuring that all Americans reap the benefits of the new Information Economy requires access to reliable voice, data and video communications services. Previously, this has meant having access to fiber optic cable or other broadband terrestrial infrastructure. But the cost of this infrastructure meant that it could

only be provided to the heaviest telecom users in the most densely populated areas. The deployment of NGSO FSS systems such as the SkyBridge System will change all that.

C. Satellite Technologies Will Allow Native Americans To Move Away From Their Traditional Dependence on Distant Telecom Providers.

The new generation of satellite systems will provide Native Americans a means to move away from the historic reliance on distant telecom service providers. Provision of high-quality telephone and advanced telecommunications services will not require deployment and maintenance of expensive terrestrial infrastructure; rather, it will require only the sale of terminals and the development of markets for such services. This is something that the tribes themselves are ideally positioned to accomplish. The infrastructure will already be in place and covering the tribal lands when these systems begin providing service in 2002. All that is needed for a user to be served is access to a terminal and a clear view of the sky. Within this model, there is opportunity for participation of tribe-owned and operated service providers whose investment would only be in the development of their own indigenous market.

CONCLUSION

By acting quickly and favorably to adopt favorable operating rules for NGSO FSS systems and license pending NGSO FSS applicants, the Commission will open up a significant avenue for access to affordable, high-quality telephone and advance

telecommunications services on tribal lands. We urge the Commission to support the development and market entry of SkyBridge and other NGSO FSS systems.

Respectfully submitted,

SKYBRIDGE L.L.C.

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